

Fisheries in MCZ Monitoring and Control Plan

Marine Conservation Zone: Torbay MCZ

D&S IFCA MCP ID	D&S IFCA Assessment ID	Fishing Activity	Feature(s)	Sub-feature(s)
MCP_TOR-MCZ-001	TOR-MCZ-001-V.2	Towed (demersal)	Subtidal Mud	Subtidal Mud

Iteration 1: July 2019

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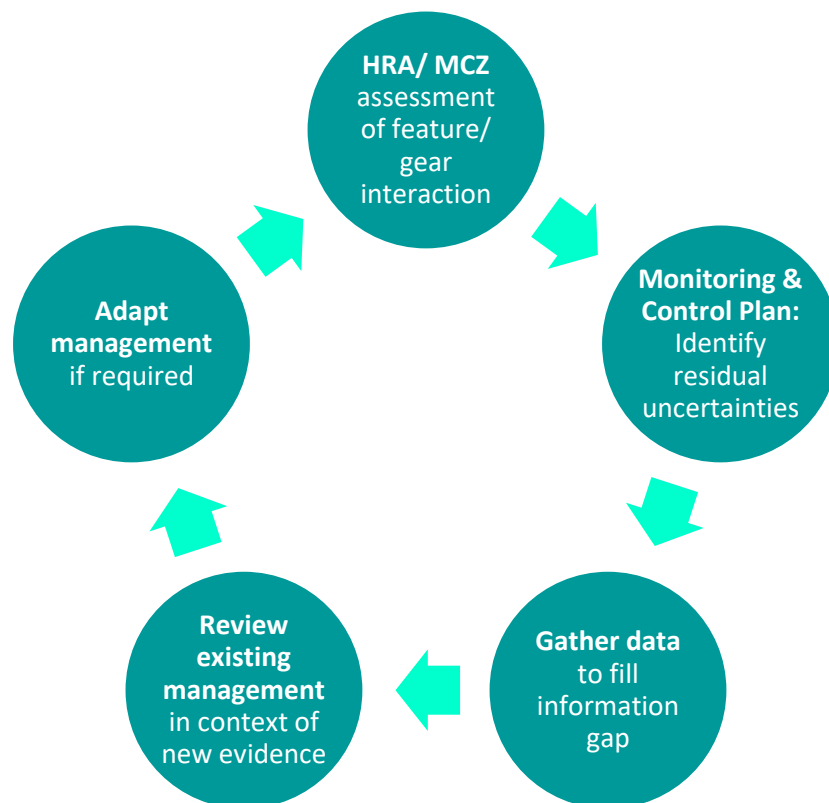
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Version	Date	Author(s)	Comments	Reviewer(s)
1	July 2019	Lauren Parkhouse		Sarah Clark

1.0 Introduction

Devon and Severn IFCA is committed to an Ecosystem Approach. Adaptive management is seen as a key tool for effectively implementing the Ecosystem Approach (Farmer et al. 2012). Adaptive management acknowledges the high levels of uncertainty in natural systems and the difficulties of making decisions based on this uncertainty. It provides a framework for a flexible and pragmatic approach to marine management, allowing sustainable development whilst adapting management and policies to respond to new information.

Monitoring and Control Plans (M&CPs) are being developed by D&S IFCA for certain gear-feature interactions in Marine Protected Areas (MPA) where Habitat Regulations Assessments (HRAs) or Marine Conservation Zone (MCZ) assessments find large uncertainties in the scientific and/or fishing effort evidence. They will provide information on what monitoring will be undertaken, how this new information will be used, the timeframes for data collection and review of any current assessments. Crucially M&CPs will identify suitable management mechanisms, should they be required following the outcomes of the data collection. The adoption of a permitting byelaw system by D&S IFCA allows for true adaptive management which can respond effectively when risks are identified. The Monitoring and Control Plan Cycle can be seen below.



This Monitoring and Control Plan should be read in conjunction with Version 2 (2019) of the MCZ assessment for the Torbay MCZ.

2.0 Residual Uncertainties

Version 1 of the MCZ assessment concluded that D&S IFCA would put forward a proposal to prohibit demersal trawling within the Torbay MCZ. This involved the IFCA undertaking an assessment of the economic impact of the removal of all demersal gears from Torbay MCZ to understand the effective displacement caused by the introduction of these management measures.

A consultation was carried out by D&S IFCA on the proposed change to permit conditions of the Mobile Fishing Permit Byelaw, to include closures of the mud to demersal towed gear. After reviewing the responses and other evidence, including the economic impact assessment, the D&S IFCA's Byelaw and Permitting Sub-Committee decided against a complete closure of the mud feature to towed demersal gear, but removed access to the whole MCZ for scallop dredge gear. Access to towed demersal gear is permitted within part of the MCZ to allow the inshore cuttle fishery to be able to operate in this area. Access to the area for demersal trawl vessels is from 1st April to 30th of June each year. The MCZ is closed to demersal trawl gear for the rest of the year – a nine month closure.

A Version 2 of the MCZ assessment has been produced and has detailed the outcome of the research and literature review undertaken. Considering the evidence detailed in this assessment, and the temporal and spatial management currently in place, D&S IFCA concludes that the activity is unlikely to have a significant impact on the mud feature of the site and therefore will not hinder the achievement of the conservation objectives. However, there is uncertainty surrounding the level of fishing effort of the cuttle fishery. This uncertainty has led to this M&C Plan being developed.

2.1 Uncertainties around fishing effort

There is currently a temporal closure of the site, with access for demersal trawl vessels from 1st April to 30th of June inclusively. This access period reflects the seasonality of the fishery informed by the industry and years of IFCA knowledge and therefore, the seasonality of the fishery is well known. There is, however, uncertainty surrounding the number of vessels, and how often each vessel operates within the access area of the site during the open season.

3.0 Monitoring Requirements

3.1 Fishing effort monitoring

In the first instance, D&S IFCA will monitor the number of Mobile Fishing Permit holders which could potentially fish in the Torbay MCZ. This will give officers a list of vessels which need to be monitored in the future.

D&S IFCA now has the means to monitor the level of fishing effort within the site using iVMS and VMS via the Mobile Fishing Permit Byelaw. As of August 2018, this was operational on all mobile gear vessels greater than 6.99m which operate within the district. D&S IFCA can track vessels in real time, go back over a period of time for each vessel, and set up an area

in which to monitor vessel activity. This information will allow the IFCA to know exactly how often the site is used, and by how many vessels.

The fishing effort data gathered for the 2019 fishery will be analysed and used as a base line. Once a baseline of effort is established, D&S IFCA will monitor if this level changes year on year.

The activity data from VMS will be assessed within three months of the fishery closing on the 30th of June to determine fishing activity levels. This analysis will include the number of passes by each vessel, the level of multiple exposures, and the area and percentage of the feature which is exposed to the trawling activity. These data will be used to review the MCZ assessment and any likely impact to the feature and communities present, and amendments to the assessments will be made if required. The revised assessments will then be sent to Natural England for advice. If necessary, the new assessment and NE advice will be presented to the D&S IFCA Byelaw and Permitting Sub-Committee to review any changes in management. This time frame will allow any changes to management, if deemed necessary by the Sub-Committee, to be made before the re-opening of the fishery on the 1st of April the following year.

4.0 Trigger points for MCZ assessment review

4.1 Fishing effort trigger point

An accurate level of effort needs to be established via fishing effort monitoring during the 2019 cuttle fishery. This baseline will then be used to monitor changes in effort level and a trigger point will then be set.

Monitoring activity	Gear types	Trigger	Action	Management mechanism (if required)
Effort monitoring	Beam trawl (whitefish), Beam trawl (shrimp), Beam trawl (pulse/wing), Heavy otter trawl, Multi-rig trawls, Light otter trawl, Pair trawl, Anchor seine, Scottish/fly, Towed (demersal/pelagic)	The trigger will be set once the 2019 effort level has been assessed. This cannot be done until a baseline is established.	1. Monitor fishery via number of permits issued to vessels in the north of the district. 2. Monitor these vessels using iVMS and VMS. Monitor number of vessels, and effort of each vessel. The effort levels in 2019 will be used as a base line.	Mobile Fishing Permit Byelaw – permit conditions

5.0 Management Mechanisms

Devon and Severn IFCA is working towards a system where all fisheries' activities are managed by permit byelaws. Those introduced so far are:

- Mobile Fishing Permit Byelaw
- Potting Permit Byelaw
- Diving Permit Byelaw
- Netting Permit Byelaw

Permit based byelaws provide scope for both fixed and flexible management measures via the conditions of use within the permits issued to fishers. The scope of the flexible conditions includes catch, gear, spatial and time restrictions. D&SIFCA has a duty to review all of the flexible conditions (per byelaw) at least every three years but can review conditions within a shorter time period as considered necessary (for example following an HRA triggered by a Monitoring and Control Plan).

Permit-based byelaws allow separation of different users (fishers) or slightly different types of fishing activity managed by a single byelaw. Separation is achieved by the issue of separate categories of permits dependent on the activity being managed. The permit byelaws often separate commercial fishers and recreational fishers, with the permit's conditions of use proportionate to their needs. By permitting fishers, D&S IFCA has a very direct way of monitoring effort. The permitting byelaws also allow for D&S IFCA to request any additional information for the management of the fishery.

The permit byelaw system can therefore fully accommodate the adaptive management approach being outlined in this Monitoring and Control Plan.

6.0 Flow Diagram of Monitoring Process

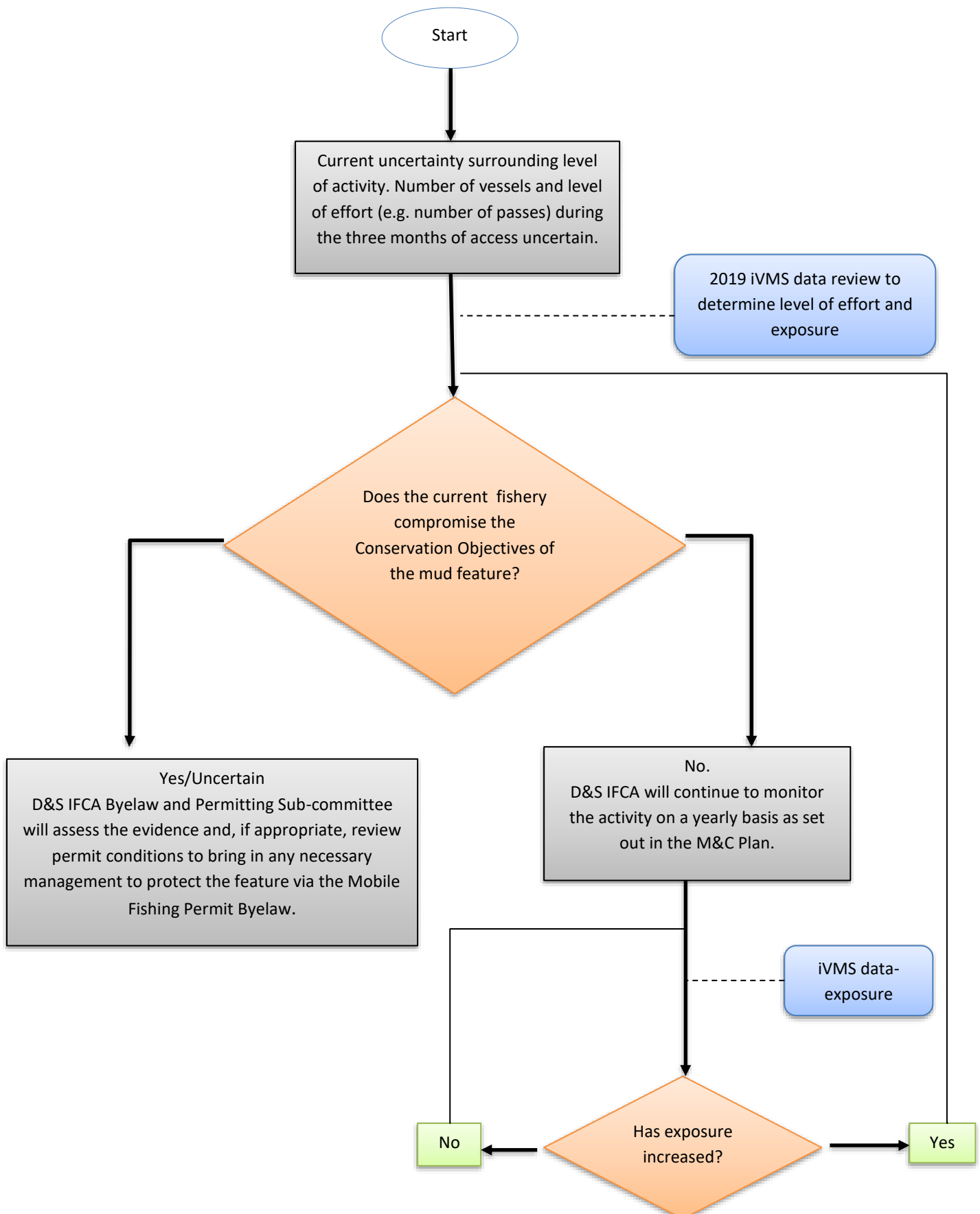


Table 2. Audit trail summary for MCZ Assessment and Natural England's advice for demersal trawling on the sub-tidal mud feature of the Torbay MCZ

D&S IFCA interaction ID	Specific gear types	Stage of submission	NE Advice reference	IFCA MCZ Conclusion	NE Advice summary	Inclusion in this Monitoring and Control Plan?
TOR-MCZ-001-V.2	Beam trawl (whitefish), Beam trawl (shrimp), Beam trawl (pulse/wing), Heavy otter trawl, Multi-rig trawls, Light otter trawl, Pair trawl, Anchor seine, Scottish/fly, Towed (demersal/pelagic)	Formal advice received from NE 21/12/2016 on version one of MCZ assessment (TOR-MCZ-001). Version two of the MCZ assessment is being submitted along with this M&C Plan.	203365 for TOR-MCZ-001	To keep part of the mud feature open to trawling for the three-month cuttle fishery, D&S IFCA has carried out a BACI study on the site, which is discussed in section 8 of the assessment. The results of this study suggest little detectable impact of either of the gear types used, on sediment or macrobenthic communities within the study area after five passes of a trawl. The condition for keeping the area open for three months for the cuttle fishery is that D&S IFCA carries out a M&C Plan.	Assessment version two has been sent to NE with this M&C Plan. No advice currently available.	Yes

